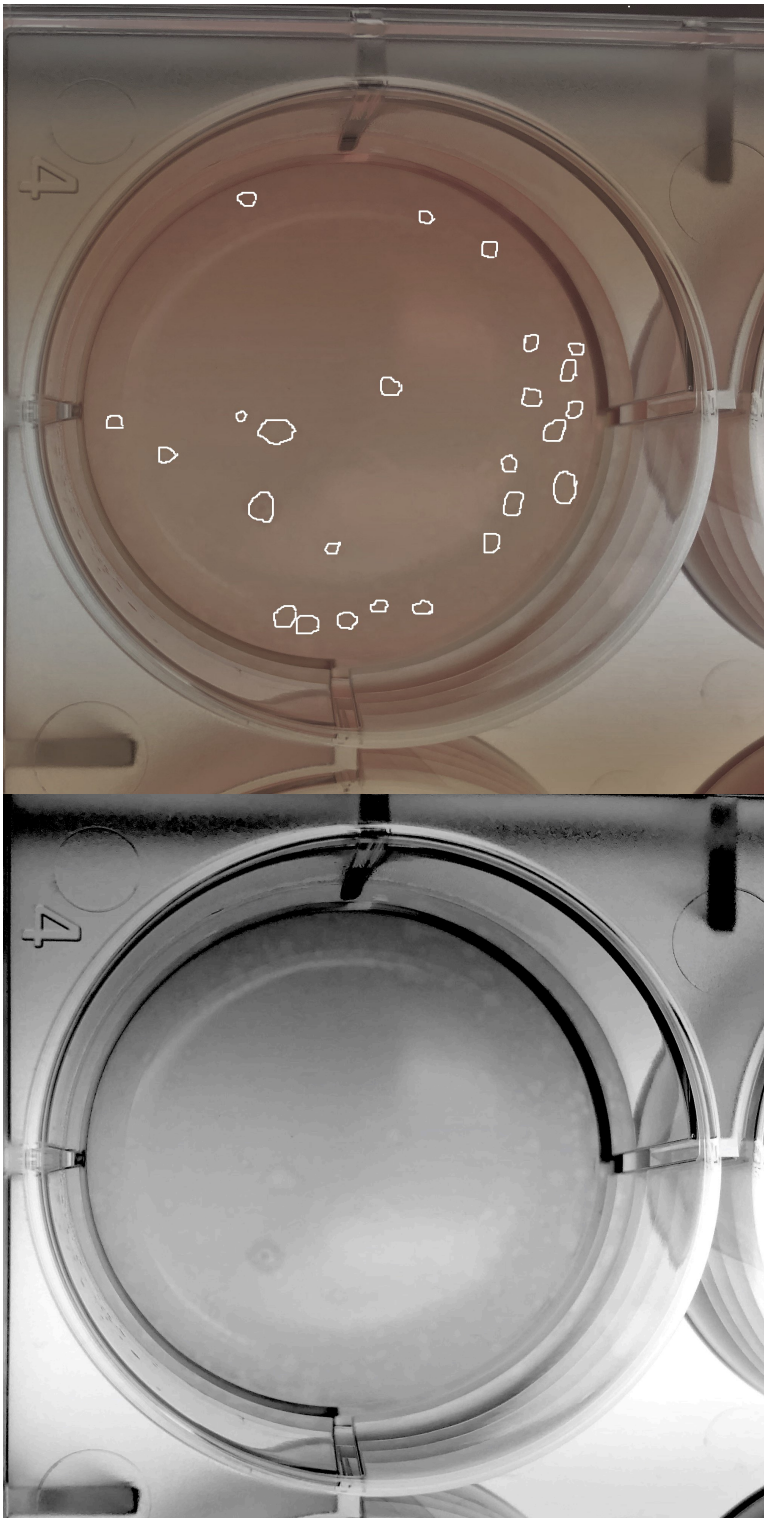
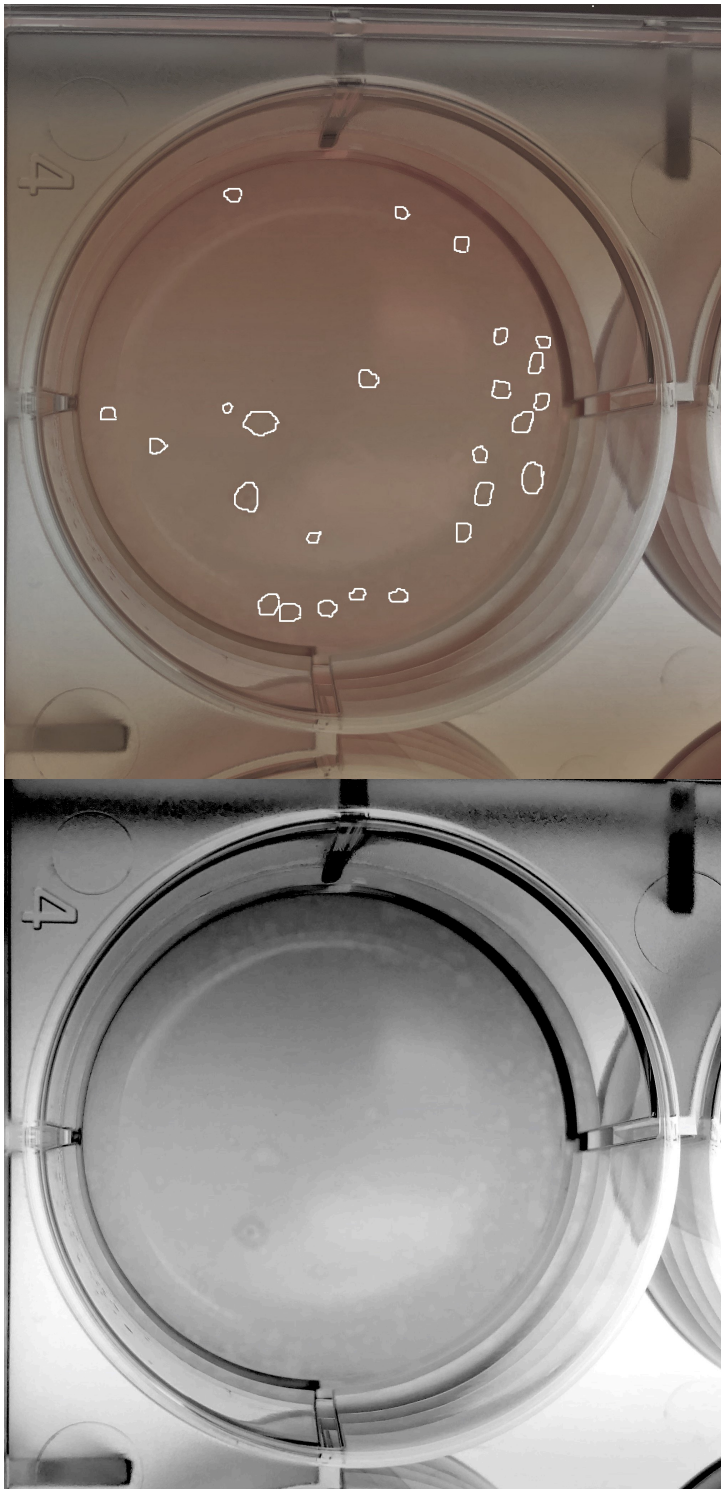
Supplemental Information

Supplemental Figure S1: Randomly chosen plaques (n=30) of BATV were measured and traced using ImageJ software (top). Original image (rendered black & white) on the bottom.



Supplemental Figure S2: Randomly chosen plaques (n=25) of BUNV were measured and traced using ImageJ software (top). Original image (rendered black & white) on the bottom.



Supplemental Figure S3: Randomly chosen plaques (n=28) of NRIV were measured and traced using ImageJ software (top). Original image (rendered black & white) on the bottom

.

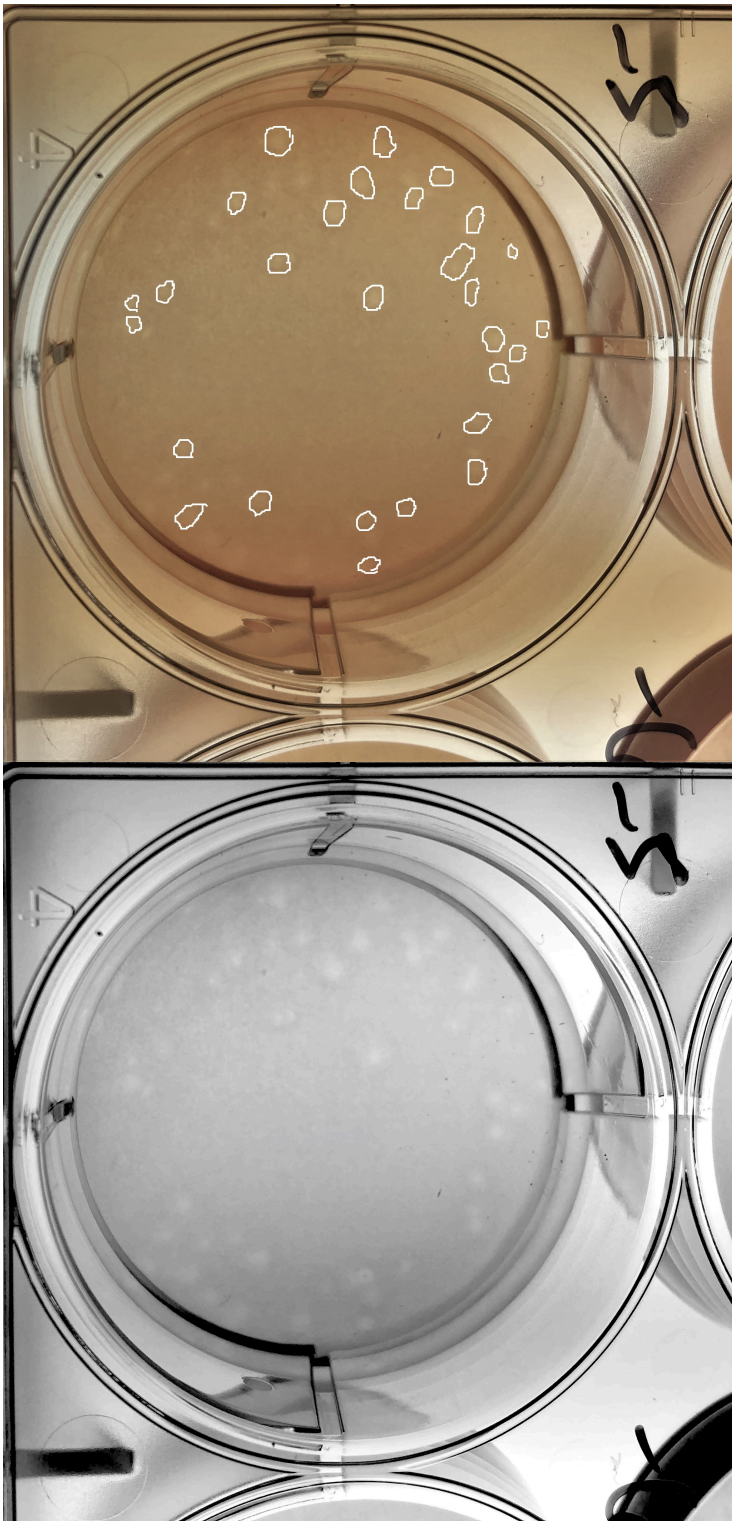


Table S1. **Homologous and cross-reactivity of qRT-PCR primers across the three viruses of interest**

		Homologous and Cross-reactivity		
Primers/Probe		BUNV	BATV	NRIV
BUNV	M	+	-	-
	L	+	-	+
BATV	M	-	+	+
	L	-	+	-
NRIV	M	-	-	+
	L	+	-	+

Supplemental Figure S4: Plot of the Tukey HSD adjusted means and 95% confidence intervals for the AUC-L comparisons of initial inoculations doses of 1, 4, and 6 pfu/mL. All comparisons were not significant ($p<.05$), as is indicated by the non-overlap in the 95% CI to the null value of 0 difference (red line).

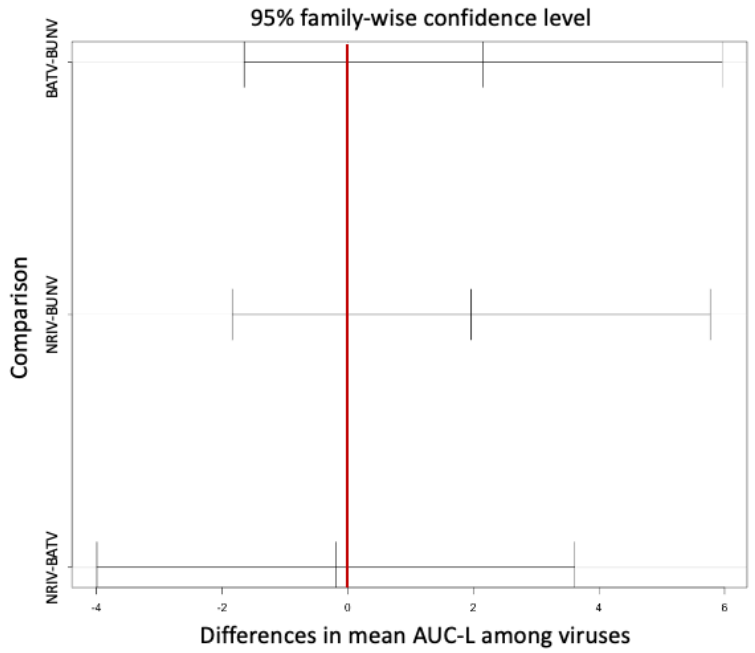


Table S2: Pairwise groupings from Tukey HSD of the main effect of initial inoculaton dose on the AUC_L.

Effect	Initial inoculation titer (log pfu/mL)	Grouping according to TukeyHSD of initial inoculation titer
Initial Inoculation titer (Log10 PFU/mL)	6	f
	5	d,e
	4	c,d
	3	a,b,c
	2	a,b
	1	a

Supplemental Figure S5: Growth curves across all initial inoculation doses. Error bars represent daily standard deviations per virus.

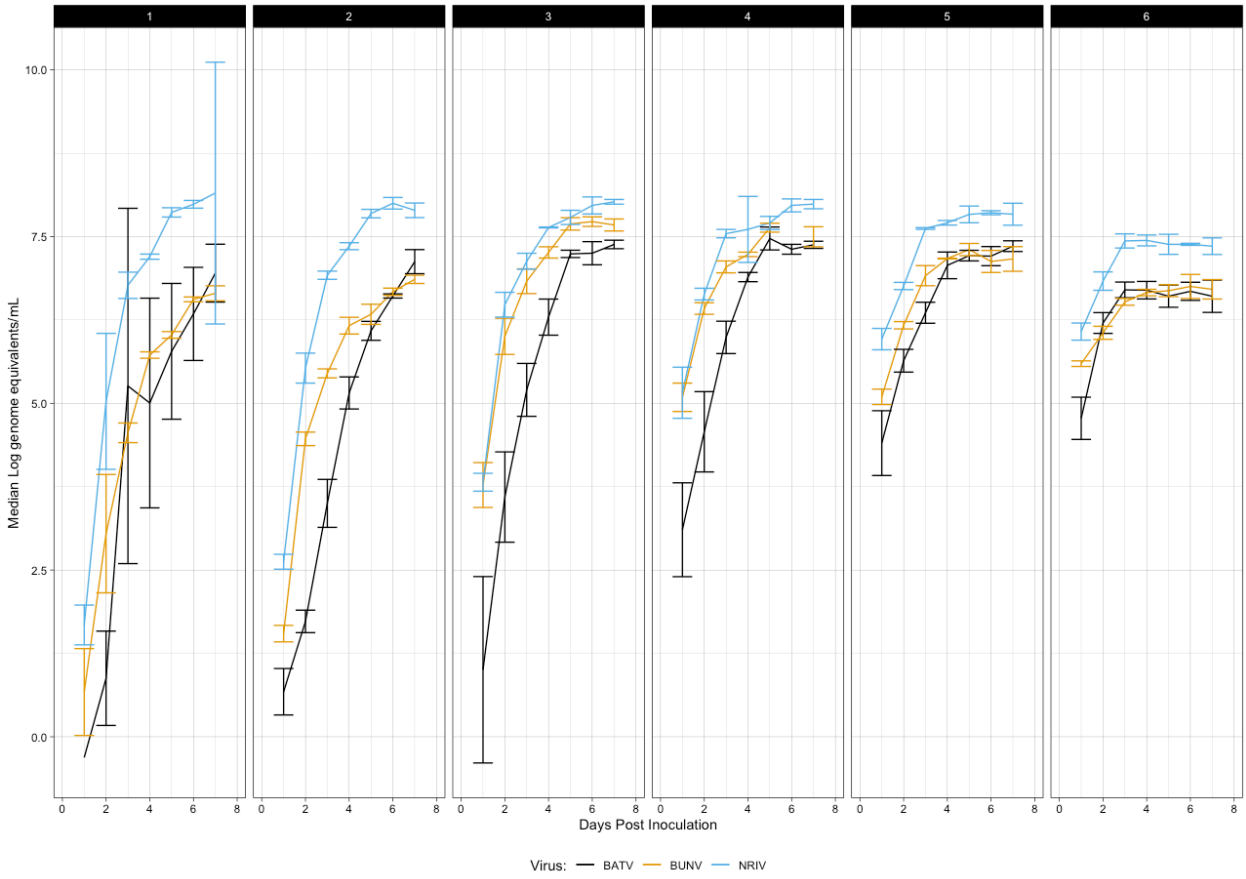


Table S3: Peak days and Doubling Times (DT) for growth curves of BUNV, BATV, and NRIV

Virus	Initial inoculation titer (log pfu/mL)	Peak day	Doubling time (in days)
BUNV	6	4	0.34
	5	5	0.25
	4	5	0.16
	3	5	0.37
	2	7	0.29
	1	7	0.38
BATV	6	4	0.10
	5	7	0.41
	4	5	0.45
	3	7	0.52
	2	7	0.51
	1	7	0.30
NRIV	6	4	0.10
	5	6	0.25
	4	6	0.41
	3	6	0.21
	2	6	0.27
	1	6	0.19

*TukeyHSD pairwise comparison was run based on an analysis of variance of the AUC-L on the main effect of initial inoculation titer.

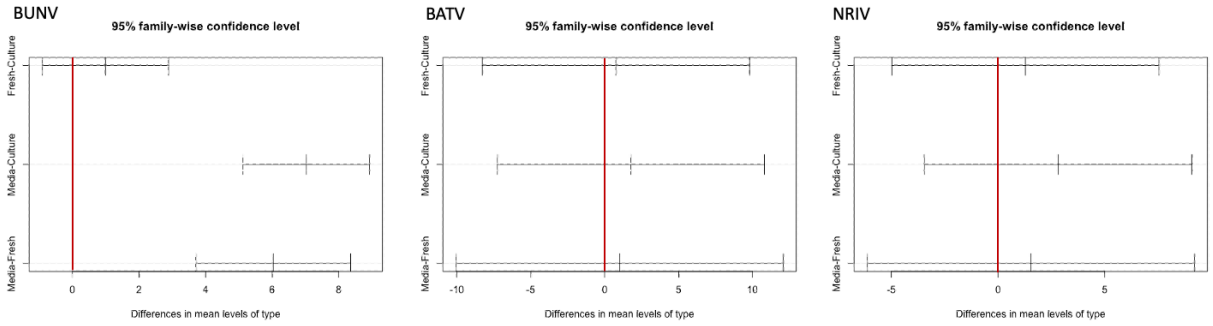
Table S4. Viral RNA concentration of supernatants collected at 30 days post-inoculation on Vero cells.

Virus	Replicate	Initial Inoculation Dose (Log/mL genome equivalents)	Genome equivalents (Log/mL) at 30 dpi
BATV	1	6	6.152288
BATV	2	6	6.170262
BATV	3	6	6.328380
BATV	1	4	6.505150
BATV	2	4	6.604226
BATV	3	4	6.561101
BATV	1	1	6.830589
BATV	2	1	6.778151
BATV	3	1	6.589950
BUNV	1	6	5.348305
BUNV	2	6	5.530200
BUNV	3	6	5.401401
BUNV	1	4	6.456366
BUNV	2	4	6.515874
BUNV	3	4	6.178977
BUNV	1	1	6.494155
BUNV	2	1	6.600973
BUNV	3	1	6.790988
NRIV	1	6	7.123852
NRIV	2	6	7.247973
NRIV	3	6	7.146128
NRIV	1	4	7.659916
NRIV	2	4	7.630428
NRIV	3	4	7.627366
NRIV	1	1	7.462398
NRIV	2	1	7.576341
NRIV	3	1	7.650308

Table S5: Viral RNA concentration collected at 30 days post-inoculation into acellular media.

Virus	Replicate	Genome equivalents (Log/mL) at 30 dpi
BATV	1	4.846337
BATV	2	5.017033
BATV	3	5.100371
BUNV	1	4.680336
BUNV	2	4.912753
BUNV	3	4.842609
NRIV	1	5.973128
NRIV	2	5.858537
NRIV	3	5.841985

Supplemental Figure S6: Tukey HSD post-hoc comparisons of the AUC_L values within each virus type across Fresh (at 6 Log10/mL initial inoculation), 30 day-old cell culture inoculum, and 30-day old media inoculum.



Supplemental Figure S7: No growth was observed from any of the viruses after inoculation of supernatant from cell culture treated with Triton-X 100, indicating successful inactivation of the viruses. Error bars are standard deviations from three replicates.